

***What Is Claimed Is:***

1           1.       A test unit for an aircraft cabin telephony system, comprising:  
2               a pair of connectors for inserting the test unit in-line within the system;  
3               an AC voltage module operative to indicate the presence of an AC voltage  
4 when the test unit is connected to the Cabin Delivery System connector of the  
5 cabin telephony system;  
6               a signal module operative to detect the presence of data signals when the  
7 test unit is connected to the Cabin Delivery System connector;  
8               a DC power module operative to indicate the presence of DC voltage when  
9 the test unit is connected to a seat telephony box within the cabin telephony  
10 system; and  
11               an AC current module operative to detect an over-current condition when  
12 the test unit is connected to the Cabin Delivery System connector of the cabin  
13 telephony system.

1           2.       The test unit of claim 1, further comprising:  
2               a relay bank operative to selectively couple the AC voltage module, signal  
3 module, and DC power module to the pair of connectors as a function of the AC  
4 voltage present on the connectors.

1           3.       The test unit of claim 2, wherein the signal module comprises  
2 means for detecting the presence of E1 signals.

1           4.     The test unit of claim 3, wherein the AC voltage module  
2 comprises:  
3           an AC voltage detect unit having  
4           a window comparator, and  
5           a current source coupled to the comparator.

1           5.     The test unit of claim 4, wherein the signal module comprises:  
2           an inbound E1 signal module configured to detect the presence of inbound  
3 E1 signals; and  
4           an outbound E1 signal module configured to detect the presence of  
5 outbound E1 signals.

1           6.     The test unit of claim 5, wherein each of the E1 signal modules  
2 comprises:  
3           a monostable multivibrator configured to lengthen the duration of the  
4 pulses of the E1 signal.